

Claim

1. A new and distinct mint plant of *Mentha piperita* 'Indus', selected through screening, field trial and analysis of monoterpene constituents of the essential oil of the germplasm, possessing the following combination of characters:
 - a. the said plant produces high amount of menthofuran ranging between 22 to 30% of total oil content,
 - b. the said plant produces high amount pulegone ranging between 9.0 to 18% of total oil content,
 - c. the said plant produces essential oil content ranging between 0.32 to 0.40% of the total oil content,
 - d. the said plant produces herbage yield ranging between 200-220 Q per ha,
 - e. the said plant is of height ranging between 65 to 70 cms, with plant canopy of area ranging between 78-85 cms,
 - f. the said plant shows resistance against leaf spot, rust, powdery mildew, lepidopteran pest *Spilarctia obliqua*,
 - ix. the said plant has Quadrangular, woody stems, of color purplish green with RHS color code of 59A,
 - x. the said plant has simple, opposite, and decussate leaves, of dark green color with color code of RHS 137A,
 - xi. the said plant has leaves of chartaceous texture,
 - xii. the said plant's leaves has Glabrous dorsal surface, with hairy on ventral veins,

- xiii. the said plant has leaves of ovate-elliptical shape, with serrate margins,
- xiv. the said plant has leaves with acute-acuminate tip, obtuse base, and broad size,
- xv. the said plant has leaf with petiole of length ranging between 0.5 to 0.9 cm,
- xvi. the said plant has leaf with of area about 7.91 cm²,
- xvii. the said plant has leaf with length ranging between 1.2 to 4.3 cm,
- xviii. the said plant has leaf width ranging between 0.6 to 2.6 cms,
- xix. the said plant has inflorescence of nature terminal spike,
- xx. the said plant has flowers of following traits:
 - xxi. arranged in whorls,
 - xxii. smooth pedicel,
 - xxiii. green color pedicel with RHS code 137B,
 - xxiv. calyx is glabrous, tubular, 5-lobed, margin ciliated, yellow green with RHS color code of 146C,
 - xxv. corolla is purple, tubular, 4-lobed, with subsequeal lobes,

- xxvi. white flowers,
- xxvii. anthers are four in number, exserted, grayed-red with RHS code of 181A,
- xxviii. stigma is bifid.
- xxix. the said plant is able to produce higher herbage, menthofuran and pulegone yield per unit area as compared to other existing improved varieties,
- xxx. the said plant produce high menthofuran when harvested 75 days after planting and 115 days after planting,
- xxxi. the said plant produce high pulegone when harvested 75 days after planting,
- xxxii. the said plant is able to produce higher pulegone and menthofuran due to up regulation and thus has the potential to isolate regulatory factors for monoterpene metabolism, and
- xxxiii. the said plant has distinct molecular profile by random amplified polymorphic DNA (RAPD) using 20 random primers (OPA) distinguishing the plant from the other existing varieties.